

### **REMARKS**

The Applicants would like to thank the Examiner for consideration and entry of the terminal disclaimers filed August 28, 2006.

Applicants and the undersigned agent would also like to extend their appreciation for the courtesy of the Examiner in granting a telephone interview on January 9, 2007. The substance of the interview is incorporated in the Interview Summary, paper no. 20070109, prepared by the Office as well as in this paper. Certain pending claims and the prior art references cited in the rejection were discussed.

Claims 16-45 are currently pending.

### **Rejections Under 35 U.S.C. § 102**

The Examiner rejected claims 16, 17, 19, 20, 22-24, 26, 28, 30-33, and 35 under 35 U.S.C. § 102(e) as being anticipated by O'Donnell Jr. (U.S. Patent No. 6,096,029). In particular, the Office action suggests that the '029 Patent discloses a method of remodeling the skin by generating a beam of radiation having a wavelength between about 1.3 and 1.8 microns, directing the beam of radiation to target a dermal region, cooling an epidermal region above the targeted dermal region, and causing thermal injury to the targeted dermal region. In addition, the Office action suggests that the '029 Patent discloses that the beam of radiation has a fluence between 10 and 150 joules per square centimeter, where cooling the epidermal region is performed during the step causing thermal injury, and where collagen is partially denatured in the target region, eliciting a healing response and increasing extracellular matrix constituents.

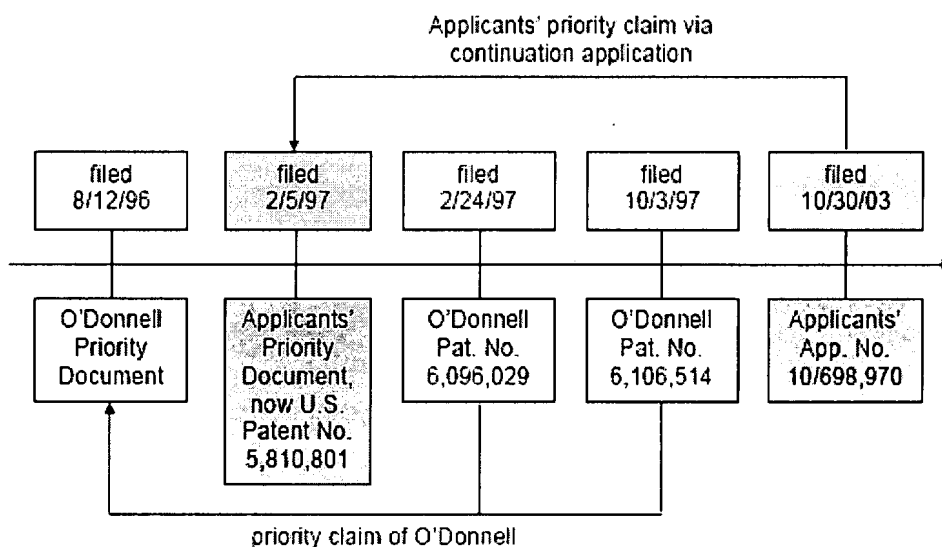
The Examiner rejected claims 16, 21, 23, 27, 30, 36, and 37 under 35 U.S.C. § 102(e) as being anticipated by O'Donnell, Jr. (U.S. Patent No. 6,106,514). In particular, the Office action suggests that the '514 Patent discloses a method of remodeling the skin by generating a beam of radiation having a wavelength between about 1.3 and 1.8 microns, directing the beam of radiation to target a dermal region, cooling an epidermal region above the targeted dermal region, and causing thermal injury to the targeted dermal region. In addition, the Office action suggests that the '514 Patent discloses that cooling the epidermal region is performed during the step causing thermal injury and that collagen is partially denatured in the target region, eliciting a

healing response an increasing extracellular matrix constituents. Applicants traverse these bases of rejection.

Applicants respectfully submit that the O'Donnell Patents are not available as prior art against the claims of the Applicants' application. The O'Donnell Priority Document (U.S. Provisional Patent Application No. 60/023,252, a copy of which is enclosed) fails to provide adequate support for the subject matter found in the issued O'Donnell Patents. FIG. 1 is a time line showing the relationship of the relevant dates for this analysis.

The '029 Patent was filed on February 24, 1997. The '514 Patent was filed October 3, 1997. Both patents claim priority to the O'Donnell Priority Document, which was filed August 12, 1996. Applicants' priority date is February 5, 1997. This predates the filing of the '029 Patent and the '514 Patent, but is after the filing date of the O'Donnell Priority Document. Nevertheless, the O'Donnell Priority Document fails to provide adequate support for the subject matter found in the issued O'Donnell Patents, and therefore, the '029 Patent and the '514 Patent are not available as prior art.

FIG 1. Applicants' and O'Donnell's filing and priority dates.



For determining patentability under 35 U.S.C. 102(e), a U.S. Patent claiming the benefit of priority to a provisional application under 35 U.S.C. 119(e) is entitled to the earlier filing date if the provisional application properly supports the subject matter relied upon to make the rejection in compliance with 35 U.S.C. 112, first paragraph. The O'Donnell Priority Document as originally filed does not support the subject matter relied upon to make the rejection. In particular, the O'Donnell Priority Document does not disclose "cooling an epidermal region of the skin above the targeted dermal region to minimize injury to the epidermal region." O'Donnell's first disclosure about using a contact handpiece with a cooling mechanism first appears in the '029 Patent, which was filed after Applicants' application. The addition of the contact handpiece with a cooling mechanism constitutes new matter that goes beyond the subject matter originally filed in the O'Donnell Priority Document.

In Figure 4 of the '029 Patent (and in the corresponding text in column 5), O'Donnell shows a tip 3 that can be cooled by air or a gas that flows into the tip through an outer chamber 6 and returns via a return path 5. These features are noticeably absent from Figures 1 and 2 of the O'Donnell Priority Document, and O'Donnell makes no mention of cooling in the O'Donnell Priority Document. Furthermore, the text of the '029 patent at column 4, lines 14-17, O'Donnell describes that "[t]he tip design may include a mechanism for cooling, such as air, gas, or liquid flow. The coolant may be refrigerated in order to further reduce the temperature at the point of contact with the skin." This text does not appear in the O'Donnell Priority Document.

Accordingly, the O'Donnell Priority Document does not properly support the '029 Patent and the '514 Patent because these patents do not disclose "cooling an epidermal region of the skin above the targeted dermal region to minimize injury to the epidermal region," which is a limitation found in Applicants' independent claims 16, 23, 30, and 38 and all dependent claims. Because the '029 Patent and the '514 Patent cannot be applied as prior art under 35 U.S.C. 102(e) against the claims of Applicants' application, Applicants respectfully submit that the rejections of claims 16, 17, 19, 20-24, 26-28, 30-33, and 35-37 are improper. Furthermore, the O'Donnell Priority Document alone does not anticipate any of Applicants' claims because, without the cooling limitation, the O'Donnell Priority Document does not teach every element of the claims either explicitly or impliedly. In view of the foregoing, Applicants respectfully

request that the rejections of claims 16, 17, 19, 20-24, 26-28, 30-33, and 35-37 under 35 U.S.C. § 102(e) be reconsidered and withdrawn.

### **Rejections Under 35 U.S.C. § 103**

The Examiner rejected claims 18, 25, and 34 under 35 U.S.C. § 103(a) as being unpatentable over O'Donnell, Jr. (U.S. Patent No. 6,096,029). In particular, the Office action suggests that it would have been obvious to one having ordinary skill in the art at the time the invention was made to direct the beam of radiation to the depth as claimed by the Applicants, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves routine skill in the art.

The Examiner rejected claims 38-45 under U.S.C. § 103(a) as being unpatentable over O'Donnell, Jr. (U.S. Patent No. 6,106,514). In particular, the Office action suggests that the '514 Patent discloses a method of treating skin substantially as claimed by the Applicants, including the stretching of skin relative to a wrinkle. In addition, the Office action suggests that it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply a beam of radiation with a wavelength having a tissue absorption coefficient in the range of 1 and 20  $\text{cm}^{-1}$ .

As discussed above, Applicants respectfully submit that the '029 Patent and the '514 Patent are not available as prior art because the O'Donnell Priority Document does not properly support the subject matter relied upon by the Examiner to make the rejection. Applicants respectfully submit that claims 18, 25, 34, and 38-45 are allowable because the O'Donnell patents fail to teach each and every element of the claims. Accordingly, Applicants respectfully request that the rejections of claims 18, 25, 34, and 38-45 under 35 U.S.C. § 103(a) be reconsidered and withdrawn.

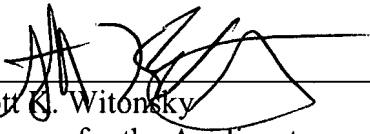
**CONCLUSION**

In view of the foregoing, the Applicants respectfully submit that the claims are in condition for allowance and request early favorable action. If the Examiner believes a telephonic interview would expedite the prosecution of the present application, the Examiner is welcome to contact the Applicants' attorney at the number below.

Respectfully submitted,

Date: April 12, 2007  
Reg. No.: 56,471

Tel. No.: (617) 526-9717  
Fax No.: (617) 526-9899

  
\_\_\_\_\_  
Scott G. Witonsky  
Attorney for the Applicants  
Proskauer Rose LLP  
One International Place  
Boston, MA 02110-2600

Attachment: Exhibit A, Provisional Application No. 60/023,252